

ABSTRACT OF THE DISCLOSURE

From horizontal and vertical coordinate values **HC** and **VC** of a pixel, a distance operation unit calculates a distance value **RV** indicating the distance from an optical-axis position to the pixel. A correction-data operation unit receives the distance value **RV**, and
5 calculates correction data **CD** for the pixel by referring to an approximation function indicating relation between distance values and correction data. The approximation function is divided into a plurality of segments, and in each segment represented by a quadratic function defined by a predetermined number of sample points.